

## INTERNATIONAL SEARCH REPORT

 International application No.  
PCT/KR2004/003232

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7 F16L 41/04**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L 41/00, 41/08, A01G 25/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
KR, JP : IPC as aboveElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
branch, hose, tube, coupling, adapter, inlet, outlet, packing, locking, groove

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP-A-2003-329187 (2003. 11. 19.)	1, 4-8, 20, 21, 23, 25, 27, 29, 33, 34, 36, 38, 40, 42, 46
Y	JP-A-2003-240182 (2003. 8. 27.)	1, 4-8, 20, 21, 23, 25, 27, 29, 33, 34, 36, 38, 40, 42, 46
Y	KR-Y1-20-188526 (2000. 7. 15.)	1, 4-8, 20, 21, 23, 25, 27, 29, 33, 34, 36, 38, 40, 42, 46
Y	KR-Y1-20-275929 (2002. 5. 18.)	1, 4-8, 20, 21, 23, 25, 27, 29, 33, 34, 36, 38, 40, 42, 46
A	D1 : KR-U-2000-18588 (2000. 10. 25.)	1-53
A	D2 : KR-A-2002-27404 (2002. 4. 13.)	1-53
A	D3 : KR-A-2002-43517 (2002. 6. 10.)	1-53

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international search

08 APRIL 2005 (08.04.2005)

Date of mailing of the international search report

**14 APRIL 2005 (14.04.2005)**

Name and mailing address of the ISA/KR


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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/KR2004/003232

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP-A-2003-329187	2003. 11. 19.	None	
JP-A-2003-240182	2003. 8. 27.	None	
KR-Y1-20-188526	2000. 7. 15.	None	
KR-Y1-20-275929	2002. 5. 18.	None	
KR-U-2000-18588	2000. 10. 25.	None	
KR-A-2002-27404	2002. 4. 13.	None	
KR-A-2002-43517	2002. 6. 10.	None	